Serial No. 09/945,483

Amendments to the Specification

Please replace the paragraph that begins at page 3, line 2̸7̸ with:

FIG. 2 is an exemplary set of orthogonal complex codes for maximizing the user length bandwidth of the code division multiple access communication system of FIG. 1 according to an embodiment of the present invention.—;and

Please add the following new paragraph at page 3, line 28.

FIG. 3 is a flowchart of an approach for determining codes according to an embodiment of the present invention.

Please add the following new paragraphs at page 10, line 18.

Referring now to FIG. 3, one example of an approach for determining codes for encoding a symbol is described. The codes determined by this approach are complex codes having a length that is greater than a real code length and less than or equal to a spreading code length.

At step 302, a real code length is determined. In one example, this may be a Walsh code having a length of 2^n, where n is an integer. At step 304, a spreading code length is determined. In one approach, the spreading code length may be determined to be the maximum ratio of bandwidth to symbol code length.

At step 306, a complex code having a complex code length is determined. The complex code is selected such that its length is greater than the real code length (determined at step 302), but less than or equal to the spreading code length (determined at step 304). In one example, a set of complex codes having a length of 4n can be determined according to equations (1) and (2). It will be appreciated, however, that the codes generated according to equations (1) and (2) are examples only, and that other examples or formula may be used to determine the complex codes.

At step 308, a symbol is encoded using one of the complex codes created at step 306. For instance, referring again now to FIG. 1, symbols being sent along the user links 108 may be encoded using

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